

REMARKS

Claims 1-45 were pending in the application. Claims 4, 7-8, 11, 23, 25-29 have been amended. Claims 5-6, 9-10, and 24 have been cancelled. Accordingly, claims 1-4, 7-8, 11-23, and 25-45 remain pending in the application.

Allowable Subject Matter

Claims 1-3, 12-22, and 30-45 have been allowed.

Claims 6-7, 10-11, and 25-28 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Applicant appreciates Examiner's consideration of these claims.

35 U.S.C. 102 Rejection

Claims 23 and 24 were rejected under 35 U.S.C. 102(e) as being anticipated by Traa (U.S. Patent No. 6,222,660).

Applicant respectfully submits that Traa fails to teach or suggest, "the first attenuation control is configured to **disable and enable the first optical attenuator to keep the power level of the incoming communication beam to within the operational range of the photodiode detector**" as recited by amended claim 23. The Examiner contends that these features are taught in column 3 lines 1-6 and Figure 2 of Traa. Applicant respectfully disagrees.

In column 3, lines 1-21 and Figure 2, Traa teaches:

In an alternative method of obtaining an optimum bias voltage for the APD 10, a family of constant optical power level curves are generated, **with each optical power level being determined by the programmable optical attenuator**

26 in response to the attenuation command from the controller 18. For each optical power level the controller 18 causes the voltage from the adaptive power supply 12 to sweep through a range of voltages while observing the output from the BER counter 32. The voltage values at which the output from the BER counter 32 changes from virtual zero to non-zero are determined. FIG. 2 shows the family of constant optical power level curves 42₁₋₅, from minimum to maximum power levels. These curves have end points, indicated by "X", between which the output from the BER counter 32 is virtually zero and beyond which the output is non-zero. The "X"s form an envelope 44 that defines an area 46 where the bit error rate is virtually zero. The bias voltage from the adaptive power supply 12 for the APD 10 is then set at a voltage value 48 that is just within the virtual zero BER area 46 closest to the breakdown voltage for the optical power level expected. (Emphasis added)

Applicant reminds the Examiner that anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. M.P.E.P 2131; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The identical invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Applicant respectfully submits that Traa fails to teach the above-highlighted features of amended claim 23. In accordance, claim 23 is believed to patentably distinguish over Traa.

35 U.S.C. § 103 Rejection

Claims 8 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Traa in view of Shuke (U.S. Patent No. 6,031,219).

Claim 8 has been amended to incorporate the features of original claims 9 and 10. Applicant submits that the amended independent claim recites a combination of features deemed allowable by the Examiner. In accordance, amended claim 8 is believed to patentably distinguish over the cited references, whether alone or combined.

Additionally, claims 4 and 5 were rejected under 35 U.S.C. §103(a) as being unpatentable over Traa in view of Shuke, and further in view of Hoffe et al. (U.S. Patent

No. 6,313,459).

Claim 4 has been amended to incorporate the features of original claims 5 and 6. Applicant submits that the amended independent claim recites a combination of features deemed allowable by the Examiner. In accordance, amended claim 4 is believed to patentably distinguish over the cited references, whether alone or combined.

Furthermore, claim 29 was rejected under 35 U.S.C. §103(a) as being unpatentable over Javitt et al. (U.S. Patent No. 6,381,055) in view of Traa. Claim 29 is dependent upon claim 23, and is therefore believed to patentably distinguish over the cited references, whether alone or combined, for at least the reasons given in the above paragraphs discussing claim 23.

CONCLUSION

In light of the foregoing amendments and remarks, Applicant submits that all pending claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. If a phone interview would speed allowance of any pending claims, such is requested at the Examiner's convenience.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5957-16203/BNK.

Respectfully submitted,



Mario J. Lewin
Reg. No. 54,268
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C.
P.O. Box 398
Austin, Texas 78767-0398
Phone: (512) 853-8800
Date: 7-25-05